CLAIMS

What is claimed is:

1. A method for separating components of a sample, comprising:

obtaining a first separation of the sample components, wherein the first separation can be performed in the absence of an applied electric field;

using an electric field to obtain a second separation of the sample components within a plurality of substantially isolated channels;

obtaining an intensity-time data record from each of the isolated channels, the intensity-time data records containing peaks; and

normalizing a migration time of a first peak with respect to a migration time of at least a second peak to correct for migration time differences between the isolated channels.

2. The method of claim 1, wherein the second peak corresponds to the presence of a reference sample component added to the other sample components before the second separation of the sample components.

3. The method of claim 2, wherein the second peak has a different fluorescence spectrum from other sample components and the different fluorescence spectrum is detected using a two-dimensional detector.

4. The method of claim 1, wherein normalizing a migration time comprises determining a ratio of the migration time of the first peak and the migration time of the second peak.

5. The method of claim 4, wherein normalizing the migration time further comprises determining an average migration time for a plurality of reference sample peaks and determining the product of the ratio and the average migration time.

6. A method for separating components of a sample, comprising:

obtaining a first separation of the sample components, wherein the first

separation can be performed in the absence of an applied electric field;

using an electric field to obtain a second separation of the sample components within a plurality of substantially isolated channels;

obtaining an intensity-time data record from each of the isolated volumes, the intensity-time data records containing peaks; and

normalizing an intensity of a first peak with respect to an intensity of at least a second peak to correct for intensity differences between the isolated channels.

7. The method of claim 6, wherein the second peak corresponds to the presence of a reference sample component added to the other sample components before the second separation of the sample components.

8. The method of claim 7, wherein the second peak has a different fluorescence spectrum from other sample components and the different fluorescence spectrum is detected using a two-dimensional detector.

9. The method of claim 6, wherein normalizing an intensity comprises determining a ratio of the intensity of the first peak and the intensity of the second peak.

10. The method of claim 9, wherein normalizing an intensity further comprises determining an average intensity for a plurality of reference sample peaks and determining the product of the ratio and the average intensity.

11. The method of claim 6, wherein the peak intensity is a peak area.

12. A system for separating components of a sample, comprising:

a first component for obtaining a first separation of the sample components, wherein the first separation can be performed in the absence of an applied electric field;

a second component for electrophoretically separating each of the sample components, the second component comprising a plurality of substantially isolated separation channels; and

a processor configured to normalize a migration time of a first volume within

one of the separation channels with respect to a migration time of at least a second volume of the same separation channel to adjust for migration time differences between the isolated channels.

13. The system of claim 12, wherein the presence of the second volume is indicated by a peak having a fluorescence spectrum different from other sample components and the detector comprises a two dimensional detector configured to detect the different fluorescence spectrum.

14. The system of claim 12, further comprising an autosampler to collect fractions of eluant from the first separation component.

15. The system of claim 14, wherein the processor is further configured to increase a rate of fraction collection at a predetermined time.

16. The system of claim 15, wherein the time for increasing the rate of fraction follows detection of a peak having a peak width that exceeds a threshold.

17. The system of claim 12, wherein the isolated separation channels comprises a substrate defining a plurality of channels therein.

18. An system for separating components of a sample, comprising:

a component for obtaining a first separation of the sample components, wherein the first separation can be performed in the absence of an applied electric field;

an electrophoresis component for obtaining a second separation of the sample components within a plurality of substantially isolated channels;

a detector configured to obtaining an intensity-time data record from each of the isolated volumes, the intensity-time data records containing peaks; and

a processor configured to normalize an intensity of a first peak with respect to an intensity of at least a second peak to correct for intensity differences between the isolated channels.

19. A method for separating components of a sample, comprising:

obtaining a first separation of the sample components, wherein the sample components are at least partially resolved on the basis of an isoelectric point of each component;

using an electric field to obtain a second separation of the sample components within a plurality of substantially isolated channels;

obtaining an intensity-time data record from each of the isolated channels, the intensity-time data records containing peaks; and

normalizing a migration time of a first peak with respect to a migration time of at least a second peak to correct for migration time differences between the isolated channels.

20. A method for separating components of a sample, comprising:

obtaining a first separation of the sample components into a first plurality of sample volumes in the absence of an applied electric field;

simultaneously obtaining an electrophoretic separation of sample components present in each of the first plurality of sample volumes, wherein sample components present in different sample volumes are separated in a respective one of a plurality of substantially isolated separation channels;

obtaining an intensity-time data record from each of the isolated channels, the intensity-time data records containing peaks; and

normalizing a migration time of a first peak with respect to a migration time of at least a second peak to correct for migration time differences between the isolated channels.

21. A method for separating components of a sample, comprising:

obtaining a first separation of the sample components into a first plurality of sample components in the absence of an applied electric field;

simultaneously obtaining an electrophoretic separation of each of the first plurality of sample components to thereby form a plurality of substantially isolated volumes from each of said plurality of sample components;

normalizing a migration time of at least one of the substantially isolated volumes with respect to a migration time of at least a second substantially isolated volume to correct for migration time differences between the isolated volumes.

22. The method of claim 21, wherein the second substantially isolated volume corresponds to a peak indicative of the presence of a reference sample component added to the other sample components.

23. The method of claim 22, wherein the reference sample component has a different fluorescence spectrum from other sample components and the different fluorescence spectrum is detected using a two-dimensional detector.

24. The method of claim 23, wherein normalizing a migration time comprises determining a ratio of the migration time of the first substantially isolated volume and the migration time of the peak.

25. The method of claim 21, wherein normalizing the migration time further comprises determining an average migration time for a plurality of reference sample peaks and determining the product of the ratio and the average migration time.

26. The method of claim 21, wherein a plurality of reference samples are added to each fraction and normalizing a migration time comprises fitting a migration time of each reference sample to a polynomial function.

27. A method for separating components of a sample, comprising:

obtaining a first separation of the sample components into a first plurality of sample components in the absence of an applied electric field;

simultaneously obtaining an electrophoretic separation of each of the first plurality of sample components to thereby form a plurality of substantially isolated volumes from each of said plurality of sample components; and

normalizing an intensity of a first substantially isolated volume with respect to an intensity of at least a second substantially isolated volume to correct for intensity differences between the isolated volumes.